AMENDMENTS TO THE CLAIMS

1. (Currently amended) A rolling method for rolling a strip of material with a constant width in a strip rolling mill, the strip rolling mill including a pair of upper and lower work rolls for rolling the strip of material, intermediate rolls for supporting the work rolls, and back-up rolls for supporting the intermediate rolls, wherein each of the work rolls is provided with a tapered portion near one end thereof and the tapered portions of the work rolls are arranged on opposite sides of roll bodies thereof with respect to roll axis directions, the rolling method comprising the steps of:

setting axial positions of the work rolls at desired work roll positions such that points at which the tapered portions of the work rolls start come within the width of the strip of material,

fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved while the strip of material is being rolled, and

changing axial positions of the intermediate rolls to control a thickness distribution in a width direction of the strip of material being rolled.

2. (Previously amended) The rolling method according to claim 1, wherein the control of the thickness distribution in the width direction of the strip of material is to mainly control a thickness distribution near widthwise edges of the strip of

material.

3. (Canceled)

4. (Previously amended) The rolling method according to claim 1, wherein at least portions of the work rolls at the points at which the tapered portions of the work rolls start are formed in an arc.

5. (Currently amended) The rolling method according to claim 1, wherein the desired work roll positions are changed according to a change in the width of the strip of material being rolled.

6. (Previously amended) The rolling method according to claim 1, wherein reversible rolling is performed by reversing the rolling direction.

7. (Previously amended) The rolling method according to claim 1, wherein the desired work roll positions are set so that an average of an actual edge drop value and a target edge drop value in at least one strip of material being rolled almost agree.

8. (Previously amended) The rolling method according to claim 1, wherein the axial positions of the intermediate rolls are controlled based on a difference between an actual edge drop

value and a target edge drop value in at least one strip of material being rolled.

9. (Currently amended) A rolling method for rolling a strip of material with a constant width in a strip rolling mill, the strip rolling mill including a pair of upper and lower work rolls each having a tapered portion near one end thereof, and a drive mechanism for moving the work rolls in roll axis directions, the rolling method comprising the steps of:

providing at least one control means for controlling a thickness distribution in a width direction of the strip of material being rolled,

setting axial positions of the work rolls at desired work roll positions such that points at which the tapered portions of the work rolls start come within the width of the strip of material,

fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved while the strip of material is being rolled, and

controlling a thickness distribution in a width direction of the strip of material by the control means.

10. (Canceled)

11. (Previously amended) The rolling method according to claim 9, wherein the control means for controlling the thickness distribution comprises at least one of means for axially moving

intermediate rolls, means for applying a bender force to the work rolls, means for applying a bender force to the intermediate rolls, means for using a thermal crown of the work rolls, means for crossing at least one of pairs of rolls, and means for changing a rolling load or draft.

12. (Previously amended) The rolling method according to claim 9, wherein the axial positions of the work rolls are set so that an average of an actual edge drop value and a target edge drop value in at least one strip of material being rolled almost agree.

13. (Previously amended) The rolling method according to claim 9, wherein the thickness distribution is controlled based on a difference between an actual edge drop value and a target edge drop value in at least one strip of material being rolled.

14. (Currently amended) A rolling method for rolling a strip of material with a constant width in a strip rolling mill, the strip rolling mill including a pair of upper and lower work rolls for rolling the strip of material, intermediate rolls for supporting the work rolls, and back-up rolls for supporting the intermediate rolls, wherein each of the work rolls is provided with a tapered portion at a vicinity to one end thereof, the tapered portions of the work rolls are arranged on opposite sides of roll bodies thereof with respect to roll axis directions, each of the intermediate rolls is provided with a tapered portion at

a vicinity to one end thereof, and the tapered portions of the intermediate rolls are each arranged on a side opposite, with respect to a roll axis direction, to the tapered portion of the associated work roll in contact therewith, the rolling method comprising the steps of:

setting axial positions of the work rolls at desired work roll positions such that points at which the tapered portions of the work rolls start come within the width of the strip of material,

fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved while the strip of material is being rolled, and

changing axial positions of the intermediate rolls to control a distribution in a width direction of the strip of material being rolled.

15. (Currently amended) A rolling method for rolling a strip of material with a constant width in a strip rolling mill, the strip rolling mill including a pair of upper and lower work rolls for rolling the strip of material, intermediate rolls for supporting the work rolls, and back-up rolls for supporting the intermediate rolls, wherein each of the work rolls is provided with a tapered portion at a vicinity to one end thereof, the tapered portions of the work rolls are arranged on opposite sides of roll bodies thereof with respect to roll axis directions, each of the intermediate rolls is provided with a tapered portion at a vicinity to one end thereof, and the tapered portion of one

work roll and the tapered portion of one intermediate roll are arranged on opposite sides of roll bodies thereof with respect to roll axis directions on the same upper side as well as on the same lower side, the rolling method comprising the steps of:

setting axial positions of the work rolls at desired work roll positions such that points at which the tapered portions of the work rolls start come within the width of the strip of material,

fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved while the strip of material is being rolled, and

changing axial positions of the intermediate rolls to control a distribution in a width direction of the strip of material being rolled.

16. (Currently amended) A rolling method for rolling a strip of material with a constant width in a strip rolling mill, the strip rolling mill including a pair of upper and lower work rolls for rolling the strip of material, intermediate rolls for supporting the work rolls, and back-up rolls for supporting the intermediate rolls, wherein each of the work rolls is provided with a tapered portion at a vicinity to one end thereof and tapered portions of the work rolls are arranged on opposite sides of roll bodies thereof with respect to roll axis directions thereof, the rolling method comprising the steps of:

setting axial positions of the work rolls at desired work roll positions by a work roll axial position setting mechanism

such that points at which the tapered portions of the work rolls start come within the width of the strip of material,

fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved while the strip of material is being rolled, and

changing axial positions of the intermediate rolls by an intermediate roll axial position moving mechanism to control a distribution in a width direction of the strip of material being rolled.

17. (Currently amended) A strip rolling facility for rolling a strip of material with a constant width comprising:

a pair of work rolls each having a roll outline shape at vicinities to first ends of roll bodies thereof, the roll outline shape having a tapered portion decreasing in diameter toward the roll end, the tapered portions of the work rolls being arranged on opposite sides of the roll bodies with respect to roll axis directions;

a moving mechanism for moving the work rolls in the roll axis directions; and

a mechanism for setting axial positions of the work rolls at desired work roll positions such that points at which the tapered portions of the work rolls start come within the width of the strip of material and fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved when the strip of material is being rolled.

18. (Currently amended) A strip rolling facility comprising:

work rolls each having a tapered portion near one end thereof;

a moving mechanism for moving the work rolls in roll axis directions;

a mechanism for setting axial positions of the work rolls at desired work roll positions when a strip of material with a constant width is being rolled such that points at which the tapered portions of the work rolls start come within the width of the strip of material and fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved; and

control means for controlling a thickness distribution in a width direction of the material.

19. (Currently amended) A strip rolling facility comprising:

work rolls each having a tapered portion near one end thereof;

a moving mechanism for moving the work rolls in roll axis directions;

a mechanism for setting axial positions of the work rolls at desired work roll positions when a strip of material with a constant width is being rolled such that points at which the tapered portions of the work rolls start come within the width of the strip of material and fixing the axial positions of the

work rolls so that the axial positions of the work rolls are not moved;

means for measuring or estimating a thickness distribution in a width direction of the material; and

control means for controlling the thickness distribution in the width direction of the material in such a way as to reduce a difference between a target thickness distribution in the width direction of the material and the measured or estimated thickness distribution in the width direction of the material.

20. (Currently amended) A strip rolling facility comprising:

a pair of work rolls each having a roll outline shape at vicinities to one ends of roll bodies thereof, the roll outline shape having a tapered portion decreasing in diameter toward the roll end, the tapered portions of the work rolls being arranged on opposite sides of the roll bodies with respect to roll axis directions;

a pair of intermediate rolls for supporting the pair of work rolls;

a pair of back-up rolls for supporting the pair of intermediate rolls;

a moving mechanism for moving the work rolls in the roll axis directions;

a mechanism for setting axial positions of the work rolls at desired work roll positions when a strip of material with a constant width is being rolled such that points at which the

tapered portions of the work rolls start come within the width of the strip of material and fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved;

a moving mechanism for moving the intermediate rolls in roll axis directions; and

control means for changing during a rolling operation axial positions of the intermediate rolls according to a thickness distribution in a width direction of the material.

21. (Currently amended) A reversible rolling facility for a strip comprising:

a pair of work rolls each having a roll outline shape at a vicinity to one ends of roll bodies thereof, the roll outline shape having a tapered portion decreasing in diameter toward the roll end, the tapered portions of the work rolls being arranged on opposite sides of the roll bodies with respect to roll axis directions;

a pair of intermediate rolls for supporting the pair of work rolls;

a pair of back-up rolls for supporting the pair of intermediate rolls;

a moving mechanism for moving the work rolls in the roll axis directions;

a mechanism for setting axial positions of the work rolls at desired work roll positions when a strip of material with a constant width is being rolled such that points at which the

tapered portions of the work rolls start come within the width of the strip of material and fixing the axial positions of the work rolls so that the axial positions of the work rolls are not moved;

a moving mechanism for moving the intermediate rolls in roll axis directions; and

control means for changing during a reversible rolling operation axial positions of the intermediate rolls according to a thickness distribution in a width direction of the material.